

Marine Corps Systems Command
PG 13 PM Anti-Armor Systems
2200 Lester Street
Quantico, VA 22134

M67854-11-I-1068
REQUEST FOR INFORMATION (RFI)
Saber Reusable LBB Shipping Container

Information Requested:

The Marine Corps Systems Command, Quantico, Virginia is seeking information in reference to providing reusable shipping containers for shipment and storage of Saber lithium ion battery boxes (LBB). Interested companies that can produce and assemble a modified commercial container to accommodate the LBB, according to the following description, are welcome to submit a reply to this RFI with their product information:

1. Materials, processes, and parts:

- a. The container shall be constructed of a rugged and impact-resistant material to maintain container integrity during normal commercial shipping and allow for multiple reuse.
- b. The container shall have provisions for the use of a security seal. The provisions will be such that the container cannot be opened without breaking the security seal.
- c. The container shall be such that all components having the same part number shall be functionally and dimensionally interchangeable.
- d. The LBB shall be supported from the enveloping structure/ walls of the design using an internal dunnaging system. The dunnage system shall be capable of normal commercial transport and multiple LBB removals and installations with no dunnage degradation. See Figures 1 and 2 below for LBB technical description and specifications.
- e. The internal dunnage system shall be permanently affixed to the interior of the container.
- f. The internal dunnage system shall be constructed of A-A59136 Type 1, Class 1, Grade C packing foam.

Li-ion rechargeable military battery system
28 V LBB

(Lithium-ion battery box)



Benefits

- Maintenance free
- Light weight
- Fast re-charge
- No ventilation required

Typical applications

- Improved Target Acquisition System
- Exportable power
- Defense

Safety features

- Electronics
 - Over-charge protection
 - Over-discharge protection
 - Over-current protection
 - Capacity (%) indicator
 - RS-422 communication available (with built-in test and battery status)
 - Over-ride pass-through switch
 - On/off switch
- Hardware
 - Pressure compensated box
 - Burst prevention mechanism
 - Carry handles
 - Arctic glove functional
 - Keyed connectors

Charger

- Current limited (31.8 V) charger

Electrical characteristics

Voltage	
OCV	31.8 V
Mid-discharge	28.8 V
Cut-off	24.0 V
Maximum charge	
	32.0 V
Capacity	
+ 54° C	>80 Ah
+ 21° C	>80 Ah
- 32° C	>70 Ah
Discharge rate	
	35 A

Mechanical characteristics

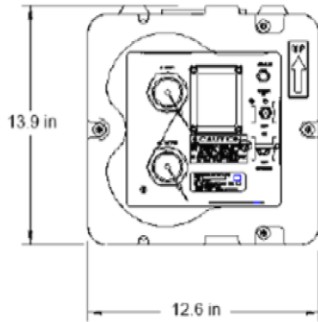
Weight	64 lbs/29 kg
Height	13.19 in/335.0 mm
Width	12.60 in/322.3 mm
Length	17.07 in/433.6 mm

Qualifications

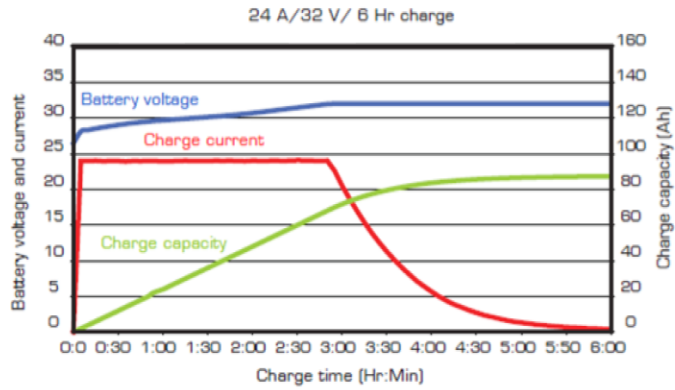
Transport	UN & DOT Approved
Altitude	50,000 ft/15,240 m
Drop tested	3 ft
Water proof	3 ft
Vibration spectrum	full
Shock spectrum	full
Electromagnetic protection	(if required)

Figure 1, Lithium-Ion Battery Box Specifications

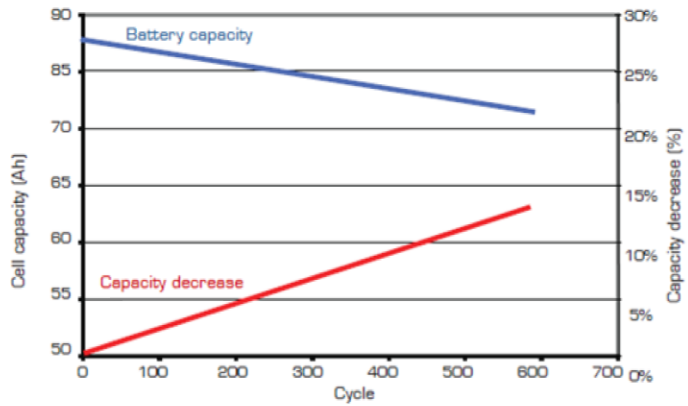
28 V LBB



Charge profile



Fade/capacity over cycle life



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Figure 2, Lithium-Ion Battery Box Specifications

2. Physical Characteristics:

- a. The net weight of the container, LBB, and internal dunnage system shall not exceed 35 kg, the maximum cargo aircraft weight threshold for UN 3840 and 3841 dangerous goods. See Figures 1 and 2 above for LBB technical description and specifications.
- b. The container closure shall be interfaced with a reusable sealing gasket which shall be retained in either the closure or the design body section. The gasket shall be capable of being replaced without the use of special tools or solvents.
- c. No special tools shall be required to use the container.

3. Transportability:

- a. The container shall, for air or ground carrier, meet the United Nations (UN) Packaging Specifications to transport a minimum of 35 kg (77 lbs) of Packing Group II, class 9, UN 3840 and 3841 Lithium-Ion Battery, hazardous materials.

4. Packaging:

- a. The container shall be marked in accordance with MIL-STD-129.
- b. The container shall include all basic instructional and operating caution markings required for safe, expeditious handling and use of the container. Markings shall include but not be limited to "Reusable Container-Do Not Destroy" and all applicable dangerous goods labels associated with a Class 9 Hazardous Materials, United Nations classifications UN3090, UN3091, UN3480, or UN3481, Packaging Group II.

This Request for Information (RFI) is for planning and informational purposes only and shall not be considered as a request for proposal, an obligation on the part of the Government to issue a request for proposal, and/or obligation on the part of the Government to acquire any products or services. No contract will be awarded from this announcement. Pursuant to Federal Acquisition Regulations (FAR) 15.201(e), responses to this RFI are not offers and cannot be accepted by the Government to form a binding contract. Interested parties are solely responsible for all costs and expenses associated with their respective response to this RFI. The Government will not reimburse interested parties for any direct and/or indirect costs and/or expenses associated with their respective responses to this RFI, including, but not limited to any direct and/or indirect costs associated with any submission or information provided to the Government. Moreover, interested parties will not otherwise be entitled to any compensation associated with the Government's use of any submission or information provided by an interested party to the Government pursuant to this RFI. Furthermore, the information provided in this RFI is notional and may change. The Government is under no obligation to revise any aspect of this RFI should any information provided herein change. The Government will provide any additional information and issue any additional requests for information at its sole discretion.

Commercial and/or non-commercial, non-developmental companies with existing equipment capable of meeting the requirements above are encouraged and invited to submit product

brochures and pricing materials outlining specifications, to include a statement of capabilities, production and delivery rate on a monthly basis, warranties offered with pricing, recommended spare parts with pricing, and system repair capability at a Marine Corps unit level. Responses shall be limited to a total of 10 pages not including brochures. Responses shall include a matrix with the requirements stated above and how the vendor's product meets each requirement. Responses will be reviewed to identify firms potentially capable of fulfilling the Governments requirements. This Request for Information (RFI) is for planning purposes only. Vendor responses shall also include a statement asserting to the commerciality of its product. The attached "Assertion of Commerciality" document or similar statements shall be provided. Responses will be reviewed to identify firms potentially capable of fulfilling the Governments requirements.

The Government recognizes that proprietary data may be part of this effort. If so included, clearly mark such restricted or proprietary data and present it as an addendum to the non-restricted/non-proprietary information. The Government does not assume any duty to contact a respondent and inquire whether any unmarked information submitted in response to this RFI is proprietary. Additionally, interested firms are requested to provide the following information in their RFI response: (a) company name, company address, overnight delivery address (if different from mailing address), cage code, point of contact, e-mail address, telephone number, fax number; and (b) indicate business size (i.e., large, foreign, small disadvantaged, veteran owned, minority owned, etc) to the Government representative listed below.

Responses to this RFI shall be emailed to Cori Walls at cori.walls@usmc.mil at the Marine Corps Systems Command, no later than 7 October 2011.